

# ***2013 ANNUAL DRINKING WATER QUALITY REPORT***



**Naval Air Station Corpus Christi  
11001 D Street  
Corpus Christi, TX 78419**



**This report is a summary of the quality of water we provided to our customers during 2013. We hope the information helps you become more knowledgeable about what is in your drinking water.**

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# 2013 Annual Drinking Water Quality Report

(Consumer Confidence Report)

Naval Air Station Corpus Christi

Environmental Office: 361-961-5353



## **SPECIAL NOTICE**

### **Required language for ALL community public water supplies:**

**You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immune compromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants, those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available for the Safe Drinking Water Hotline at 1-800-426-4791.**

## **Public Participation Opportunities**

### **NASCC:**

**Date:** None Scheduled.

**Phone:** (361) 961-3776 (For comments/questions)

### **City of Corpus Christi (Annual Public Meeting):**

July 1, 2014 at 6:00 p.m. at the Water Utilities Building located at 2726 Holly Road, Corpus Christi, Texas.

## **OUR DRINKING WATER IS REGULATED**

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

## **SOURCE OF DRINKING WATER:**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

## Where do we get our drinking water?

Naval Air Station Corpus Christi (NASCC) purchases water from the City of Corpus Christi. NASCC disinfects the purchased water on an as needed basis. Corpus Christi's primary supply of water comes from surface water sources; primarily the Nueces River. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus on our source water protection strategies. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/> add 1780017 after 'Water System No.' then click on "Search for Water System" at bottom of page. For more information on our system, please contact Charlie Potts at 361-961-2995.

## ALL drinking water may contain contaminants.

When drinking water meets federal standards there may not be any health-based benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline (1-800-426-4791).

## Secondary Constituents

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA.



These constituents are not causes for health concern. Therefore, secondary constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

## About the Following Pages

The pages that follow list all of the federally regulated or monitored contaminants, which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

## Definitions:

**(MCL) Maximum Contaminant Level:** Is the highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**(MCLG) Maximum Contaminant Level Goal:** Is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

**(MRDL) Maximum Residual Disinfectant Level:** Is the highest level of disinfectant allowed in drinking water. There is convincing that addition of a disinfectant is necessary for control of microbial contaminants.

**(MRDLG) Maximum Residual Disinfectant Level Goal:** Is the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

**(TT) Treatment Technique:** Is a required process intended to reduce the level of a contaminant in drinking water.

**(AL) Action Level:** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

## Abbreviations:

**(NTU)** → Nephelometric turbidity units (a measure of turbidity)

**(MFL)** → Million fibers per liter (a measure of asbestos)

**(MPN)** → Most probable number

**(pCi/L)** → Pico-curies per liter (a measure of radioactivity)

**(ppm)** → Parts per million or milligrams per liter (mg/L)

**(ppb)** → Parts per billion or micrograms per liter (µg/L)

**(ppt)** → Parts per trillion, or nanograms per liter

**(ppq)** → Parts per quadrillion, or picograms per liter

# NAVAL AIR STATION CORPUS CHRISTI

## *Inorganic Contaminants*

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2013	Fluoride	0.21	0.16	0.25	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer & aluminum factories.
2013	Nitrate	0.35	0.19	0.58	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2011	Gross beta emitters	5.4	5.4	5.4	50	0	pCi/L	Decay of natural & man-made deposits.

## *Organic Contaminants*

Is provided on the City of Corpus Christi 2013 CCR which can be found on the following website:

<http://www.cctexas.com/government/water/general-info-water-qualitysupply/water-quality/reports/index>

## *Maximum Residual Disinfectant Level*

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2013	Chloramine Residual	3.95	0.0	4.0	4	4	ppm	Disinfectant used to control microbes.

## *Disinfection Byproducts*

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2013	Total Haloacetic Acids	22.1	18.0	24.2	60	ppb	Byproduct of drinking water disinfection.
2013	Total Trihalomethanes	41.9	34.8	56.0	80	ppb	Byproduct of drinking water disinfection.

## *Unregulated Initial Distribution System Evaluation for Disinfection Byproduct*

This evaluation is sampling required by the EPA to determine the range of total trihalomethane and haloacetic acid in the system for future regulations. The samples are not used for compliance, and may have been collected under non-standard conditions. EPA also requires the data to be reported here.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2007	Total Haloacetic Acids	32.6	0	71.1	NA	ppb	Byproduct of drinking water disinfection.
2007	Total Trihalomethanes	75.3	32.6	157.2	NA	ppb	Byproduct of drinking water disinfection.

## *Unregulated Contaminants*

Bromoform, chloroform, bromodichloromethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2013	Chloroform	5.2	3.7	7.4	ppb	Byproduct of drinking water disinfection.
2013	Bromoform	14.0	6.2	25.0	ppb	Byproduct of drinking water disinfection.
2013	Bromodichloromethane	11.8	10.7	13.7	ppb	Byproduct of drinking water disinfection.
2013	Dibromochloromethane	13.6	9.3	19.3	ppb	Byproduct of drinking water disinfection.

### *Lead and Copper (Tested every 3 years)*

Year	Contaminant	The 90 <sup>th</sup> Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2013	Lead	15.5	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2013	Copper	0.213	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

### *Required Additional Health Information for Lead*

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water supply is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

### *Turbidity*

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Single Measurement MCL	Source of Contaminant
2013	Turbidity	0.24	100.0	≤0.3	1.0	Soil runoff.

### *Total Coliform*

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are harder than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Year	Contaminant	Highest Monthly % of Positive Samples	MCL	Unit of Measure	Source of Contaminant
2013	Total Coliform Bacteria	0.009	*	Presence	Naturally present in the environment.

\* Presence of coliform bacteria in 5% or more of the monthly samples.

### *Fecal Coliform* REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA





### *Secondary and Other Constituents Not Regulated*

(No associated adverse health effects)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2013	Bicarbonate	134	134	134	NA	ppm	Corrosion of carbonate rocks such as limestone.
2013	Chloride	137	67	199	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2013	Hardness as Ca/Mg	185	152	224	NA	ppm	Naturally occurring calcium and magnesium.
2013	pH	7.6	6.77	7.9	>7.0	units	Measure of corrosivity in water.
2013	Sodium	94.3	58.6	127	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2013	Sulfate	76	51	97	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2013	Total Alkalinity as CaCO <sub>3</sub>	122	100	138	NA	ppm	Naturally occurring in soluble mineral salts.
2013	Total Dissolved Solids	514	334	671	1000	ppm	Total dissolved mineral constituents in water.

